

State and national air pollution rules may affect you and your business. Some of these rules are new, some have been around for awhile, and some have recently been revised. These new and revised regulations will change the way you clean parts. The location of your business, the size of your operation, and the types of solvents used will determine how this law affects you. Smaller businesses never before regulated by state and federal agencies will need to comply with these laws. The Small Business Clean Air Assistance Program exists to help smaller companies understand and comply with Clean Air Act regulations.

Federal Air Pollution Standards

On December 2, 1994, the U.S. Environmental Protection Agency (EPA) issued a MACT (Maximum Achievable Control Technology) standard, regulating hazardous air pollutant emissions generated from the use of halogenated solvent cleaning machines. The goal of the standard is to reduce the amount of harmful pollutants emitted into the atmosphere when solvents evaporate.

Does This Federal Standard Affect My Business?

Businesses that use any of the following halogenated compounds, or a combination of them, in concentrations greater than 5% by weight as a cleaning or drying agent are affected by the federal standard:

- ✓ Methylene Chloride,
- ✓ Trichloroethylene,
- ✓ Carbon Tetrachloride,
- ✓ 1,1,1-Trichloroethane,
- ✓ Chloroform, or
- ✓ Perchloroethylene

To determine if the solvent you use contains any of these chemicals, refer to the material safety data sheet (MSDS) or ask your supplier. Mineral spirits and Stoddard solvent, two commonly used cleaning solvents, are not affected by this standard.

How Does My Business Comply With This Standard?

The federal standard offers several compliance options. Your business may choose to:

- × Switch to a non-chlorinated, water-based or semi-water based solvent. This option will exempt your facility from this federal standard. So it's in your best interest to investigate this option.
- × Comply with one of the equipment standards;
- × Show that your cleaning machine meets the appropriate idling emission limit; or
- × Meet the appropriate alternative emission limit.

Affected facilities must file Initial Notification Reports. Existing sources (affected facilities with solvent cleaning machines constructed or reconstructed before or on November 29, 1993), must file this report by August 29, 1995. New sources (affected facilities with solvent cleaning machines constructed or reconstructed after November 29, 1993), should have filed this by January 31, 1995, or before the construction or reconstruction begins.

Wisconsin Air Pollution Standards

Wisconsin's regulation to control air pollution from solvent metal cleaning operations (ch. NR 423, Adm Code), was established in

1980 and revised in 1996 to eliminate any conflicts with the MACT standard.

Does This State Standard Affect My Business?

Throughout the state, this rule applies to the following types of solvent metal cleaning operations:

- ❶ *Cold Cleaners (parts cleaners)*
- ❷ *Open Top (batch) Vapor Cleaners*
- ❸ *Conveyorized Vapor Cleaners*
- ❹ *Conveyorized Non-Vapor Cleaners*

In the nine-county ozone nonattainment area, *Process Line Wipe Cleaning Operations* are also addressed. This nonattainment area includes the nine counties of: Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington and Waukesha.

Exemptions to the Rule

Solvent metal cleaning operations throughout the state are affected by this standard. On a **statewide** basis, you are exempt if:

- you use only cleaning solvents with a VOC (volatile organic compound) content of 2.0%, by volume, or less; or
- you use photochemically unreactive solvents (i.e. methylene chloride or 1,1,1 trichloroethane).

If your facility is **not** in the ozone nonattainment area, then your cleaner may be exempt from chapter NR 423, Wis. Adm. Code, if it is:

- a cold cleaner with a throughput less than 1.5 gallons of solvent per day; or
- an open top vapor cleaner or conveyorized cleaner emitting less than 15 lbs of VOC per day.

If you do not meet these emission-based exemptions, you may be exempt from the pollution control device requirements of ch. NR 423 if you have:

- a cold cleaner with an open area less than 1.1 sq. ft.;
- an open top vapor cleaner with an open area less than 10.8 sq. ft.; or
- a conveyorized cleaner with an open area less than 21.6 sq. ft.

If your facility **is located** in the ozone nonattainment area, your cleaner may be exempt from the control device requirements if you have:

- a cold cleaner with a throughput less than 1.5 gallons of solvent per day and an open area less than 1.1 sq. ft.;
- an open top vapor cleaner emitting less than 15 pounds of VOC per day and having an open area less than 10.8 sq. ft.;
- a conveyorized cleaner emitting less than 15 pounds of VOC per day and having an open area less than 21.6 sq. ft. ; or
- a wipe-cleaning operation emitting less than 15 pounds of VOC per day.

Whether you are exempt or not, you must still comply with the general reporting and recordkeeping requirements.

How Does My Business Comply With This Standard?

The state air pollution regulation for solvent metal cleaning affects businesses throughout Wisconsin. However, the revisions to the law apply only to operations in the ozone nonattainment area. Depending on how the original ch. NR 423 regulations affected you, businesses in the ozone nonattainment area were to have complied with revisions to the regulation by one of the following dates: May 15, 1995; September 15, 1995; or May 15, 1996.

If your degreasing operation is located outside of the ozone nonattainment area, then the revisions do not apply to you and you should already be in compliance with the regulation.

If you are not in compliance, talk with your DNR inspector to arrange a compliance schedule or contact the Small Business Clean Air Assistance Program. The SBCAAP has detailed fact sheets available summarizing both the Solvent MACT and the Solvent RACT rules.

Pollution Prevention

Pollution Prevention reduces the amount of pollutants entering the environment by using alternative materials; changing processes; or increasing the efficiency of current processes. By using pollution prevention alternatives, you may save your business money and avoid environmental regulations.

Ways Pollution Prevention Benefits Your Business:

- ✓ Reduces costs of waste disposal, raw materials and insurance premiums;

- ✓ Reduces costs of complying with environmental regulations;
- ✓ Increases efficiency and competitiveness;
- ✓ Improves product quality and workplace conditions;
- ✓ Reduces regulatory burdens such as record keeping and reporting; and
- ✓ Decreases long-term liability.

Solvent Degreasing Pollution Prevention Alternatives:

- × Control emissions from solvent parts cleaning.
- × Use less toxic or less volatile cleaning solvents.
- × Switch to citrus-based, water-based or semi-water-based cleaning solvents.
- × Change to a blast-cleaning or absorbent-cleaning method.

The Department of Natural Resources houses a non-regulatory Bureau of Cooperative Environmental Assistance, which coordinates pollution prevention activities. The staff in CEA are divided into industrial sectors. They presently cover the following sectors with solvent cleaning aspects: Auto Services at 608/267-3763; Chemical Manufacturers at 414/263-8681; Metal Plating & Finishing at 608/267-3125; Salvage Yards at 715/831-3263.

The University of Wisconsin-Extension's Solid and Hazardous Waste Education Center offers technical experts, free of charge, to help you choose an appropriate pollution prevention option. To contact a pollution prevention specialist, call 608/265-2360 or 715/346-2793.

Wastewater Regulations

Facilities that substitute water-based cleaners for degreasing solvents will need to properly dispose of the spent cleaning baths and rinses. If you discharge to a municipal sewer system, the discharge must comply with the wastewater pretreatment requirements found in s. NR 211, WI Adm. Code, local Sewer Use Ordinances and any applicable categorical standards. Contact your DNR Regional Pretreatment Coordinator and your local sewage treatment plant for specific requirements.

If a facility is not connected to a municipal sewer system, another disposal method is required. Wastewater may not be discharged to a soil absorption (septic) system, storm sewer, drainage ditch or surface water unless you have obtained a Wisconsin Pollutant Discharge Elimination Permit (WPDES). It may not be practical to obtain a permit for small vol-

umes of water, so contact a DNR Area Wastewater Engineer for further information.

For more information on wastewater regulations, contact the DNR's Bureau of Wastewater Management at 608/266-0156.

Hazardous Waste Management and Minimization

If you're involved in cleaning parts with solvent material, you may be creating some form of hazardous waste regulated by the DNR and the EPA. Examples of hazardous wastes can include: contaminated or spent (used-up) solvents from process applications; industrial refuse such as rags or filter cartridges; and diluted wastewater containing low concentrations of solvent and residues.

When determining if your business generates hazardous waste, you should become familiar with the terms "listed" hazardous waste and "characteristic" hazardous waste. Many of the materials used in solvent degreasing operations are considered "listed" hazardous wastes because they are listed in the state regulations, chs. NR 600-685, Wis. Adm.

Code. (The specific tables listing hazardous waste are located in s. NR 605.09.) Other wastes may be "characteristic" hazardous waste because the material exhibits characteristics of ignitability, corrosivity, reactivity or toxicity (see s. NR 605.08).



To determine if your waste is hazardous, check information from suppliers, look at container labels, read your Material Safety Data Sheets (MSDS) or have a sample of your waste analyzed.

Once you've figured out if your waste is hazardous, you need to figure out what kind of hazardous waste "generator" you are. There are three kinds of generator classifications in Wisconsin:

- Very Small Quantity Generators (VSQG)
- Small Quantity Generators (SQG)
- Large Quantity Generators (LQG)

Under federal and state laws, all hazardous waste generators will have to comply with some regulations, depending on classification. To make a hazardous waste determination or generator classification, contact DNR. The DNR offers a free handbook,

Managing Your Hazardous Wastes: A Guidebook for Wisconsin Small Quantity Generators.

If you are interested in minimizing your hazardous waste, take advantage of the over 150 publications offered through DNR's Pollution Prevention Clearinghouse. The clearinghouse has factsheets, case studies, equipment supplier lists and handbooks to help you identify cleaning alternatives.

For hazardous waste management information, call your DNR regional hazardous waste specialist. For hazardous waste minimization information call 608/266-2111.

Ozone Depleting Substances

Chlorinated compounds used in some degreasing solvents such as methyl chloroform, carbon tetrachloride and chlorofluorcarbon-113, deplete the stratospheric ozone layer (the atmosphere layer about 9 - 31 miles

above earth which filters out harmful ultraviolet rays). Under an international agreement, these substances will not be produced after December 31, 1995. This agreement will affect



other ozone-depleting substances, such as those used in refrigerants, fire suppressants, foam-blowing agents and propellants. Commonly used solvents that do not deplete the ozone will still be available, including: perchloroethylene, methylene chloride and trichloroethylene.

The EPA evaluates and approves alternative solvents and degreasing equipment that can be substituted for the ozone-depleting solvents. Lists of these approved chemicals and methods are available through the EPA's Significant New Alternative Policy. Manuals are available from EPA's STRATOSPHERIC OZONE HOTLINE at 1-800-296-1996.



Contacts for More Information or Assistance.

The Small Business Clean Air Assistance Program helps smaller businesses understand and comply with the Clean Air Act regulations. Contact one of the program's Clean Air Specialists for more assistance: Renée Lesjak Bashel at 608/264-6153 or Tom Coogan at 608/267-9214.



For further information on the solvent metal cleaning regulations contact your DNR Regional or Service Center office shown on the **DNR Contact Fact Sheet**.